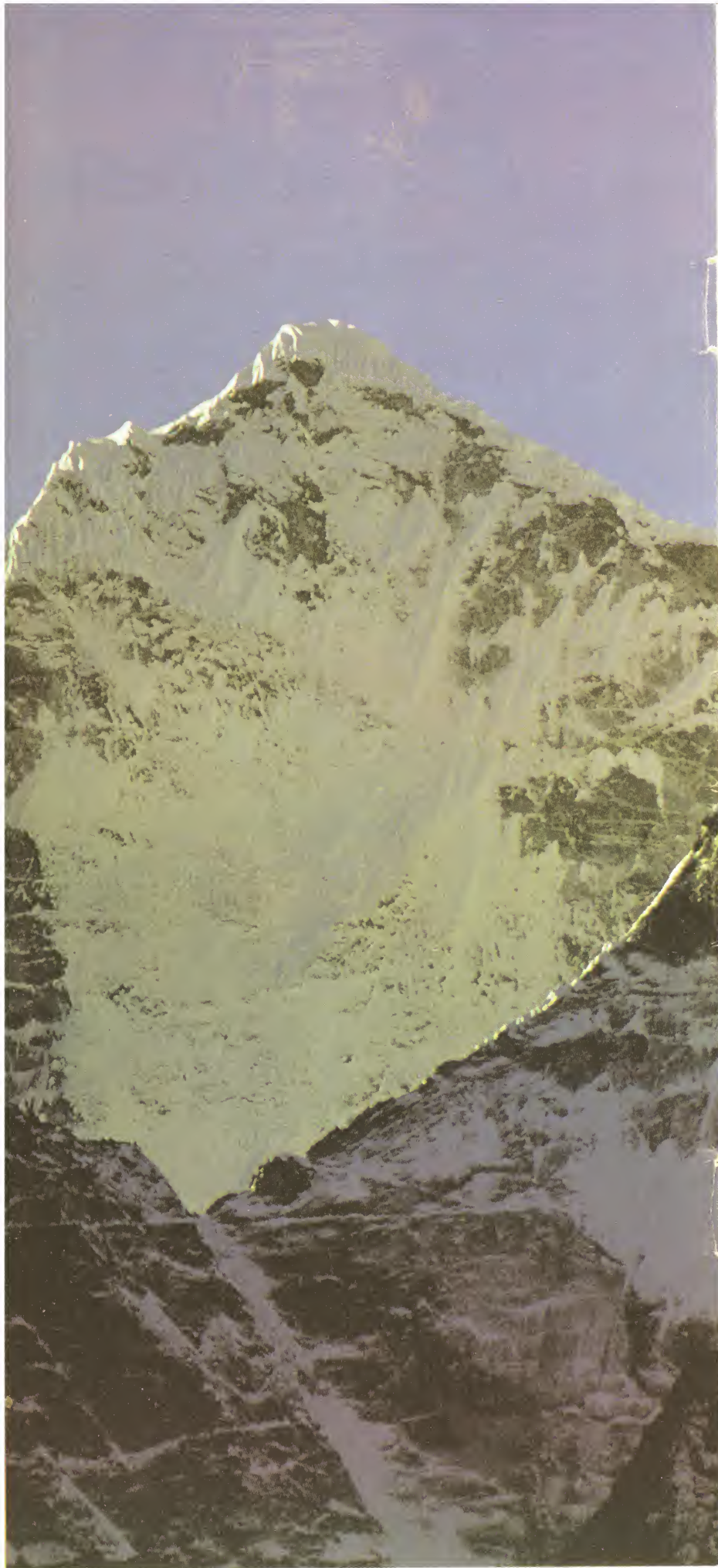
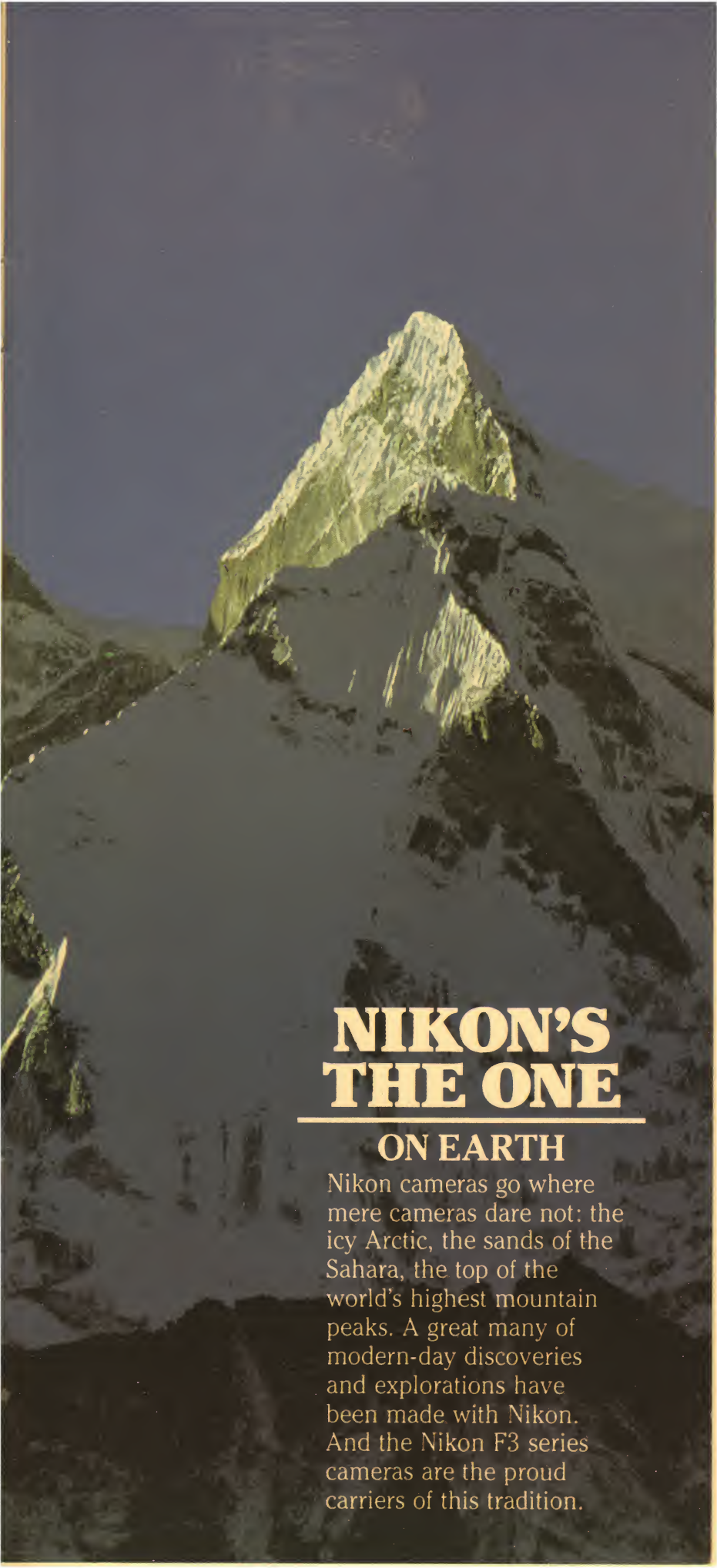


Nikon F3 Series

The choice of
professionals







NIKON'S THE ONE

ON EARTH

Nikon cameras go where mere cameras dare not: the icy Arctic, the sands of the Sahara, the top of the world's highest mountain peaks. A great many of modern-day discoveries and explorations have been made with Nikon. And the Nikon F3 series cameras are the proud carriers of this tradition.





NIKON'S THE ONE

IN THE NEWS

Newspapers and magazines, posters and ads—the world's greatest pictures have been taken—are being taken—with Nikon. And the reason is simple. The Nikon F3 series cameras, for one, meet and often exceed the standards of professional photographers, art directors and editors... and their audience.

The choice of professionals



Pros in space, in the wilderness, in the cities have made their choice clear. So go take some of the world's greatest pictures your way... the Nikon F3 way. You'll surprise—and reward—your friends, those you love, yourself.

THE NIKON F3 Series

No other camera comes close

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of
professionals



Nikon F3HP High-Eyepoint

Top-of-the line Nikon

The standard F3 series camera. Precise frame coverage shows virtually 100% of the image that will be recorded on the film even with your eye, bespectacled or otherwise, an inch away from the viewfinder's eyepiece. Easy-to-read liquid crystal display (LCD) shows shutter speeds from 1/2000 sec. to 8 full seconds. Complete interchangeability of 6 finders, 22 focusing screens and 4 camera backs. Plus the most comprehensive line of accessories in 35 mm SLR photography. Truly a camera that will work wonders with your imagination.

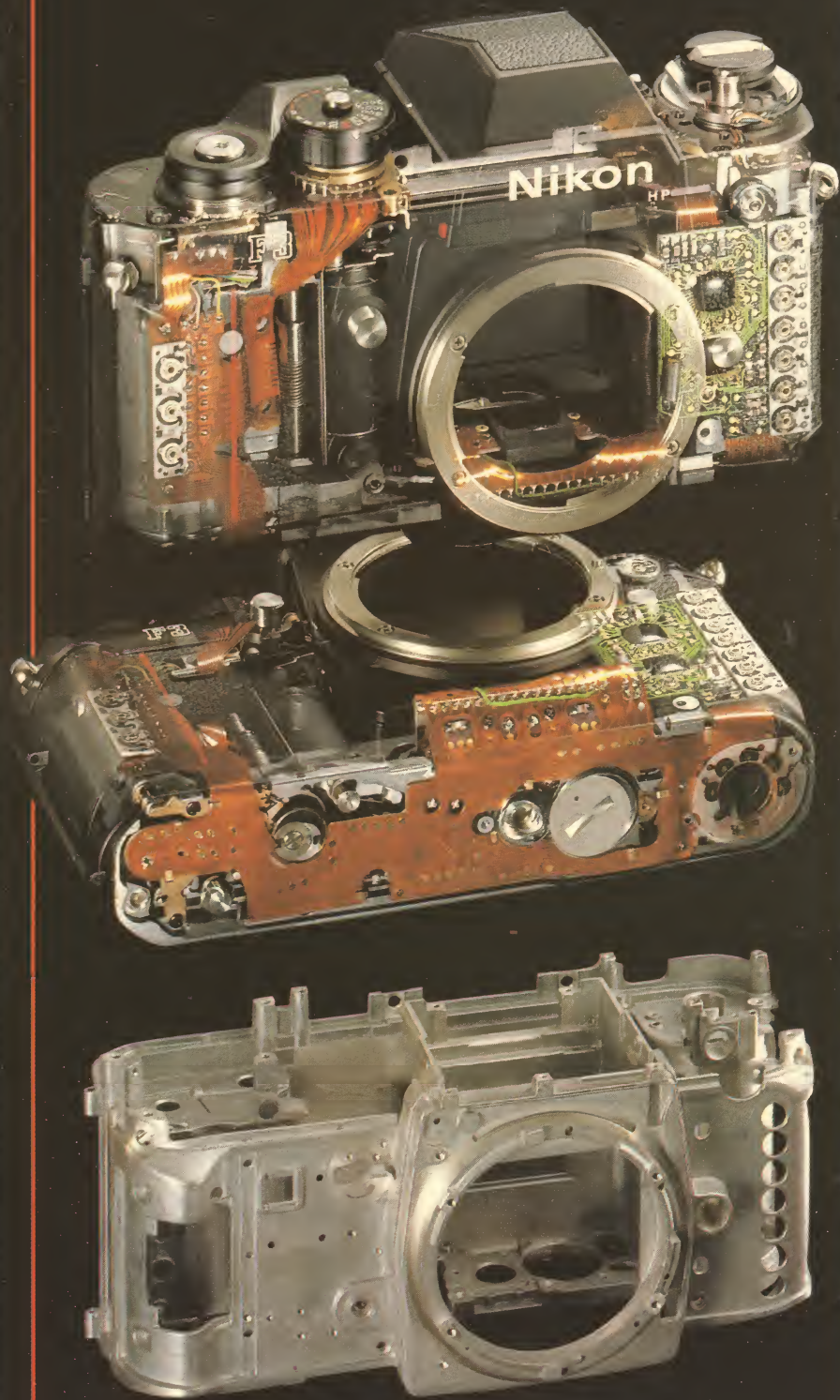
Nikon F3/T

You won't find a tougher camera

Bump it. Bang it. Work it hard and long. Now the F3HP's made of titanium, one of the world's strongest metals. Every part of the body is covered: the high-eyepoint viewfinder, the camera top and bottom, the entire camera back. With precision parts well guarded, the new F3/T sails through demanding photographic situations to deliver the shots you've worked so hard to achieve—year in, year out—virtually unscarred.



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Design

Solid die-cast body

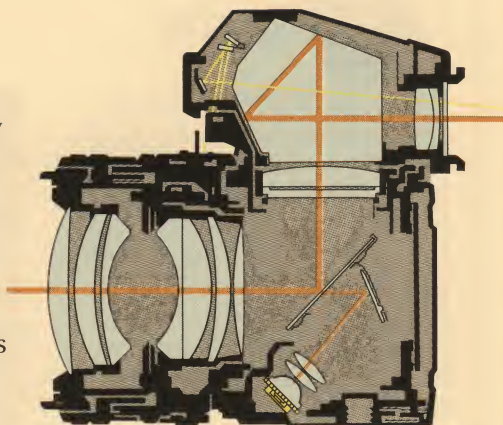
To make the camera body sturdy but light, Nikon made the camera's backbone a two-piece casting of copper silumin aluminum alloy, an incredibly strong, corrosion-resistant metal.

Advanced microelectronics

Wrapped around the backbone is the camera's "central nervous system". Data processing is handled by a staggering array of microelectronic components, including six ICs and LSIs, a Nikon-designed functional resistance element (FRE), one silicon photodiode (SPD), a quartz oscillator, plus the LCD. All electronic components are integrated onto a single flexible printed circuit (FPC) board to provide the correct exposure in any picture-taking situation with speed and reliability. And remember, the Nikon F3 series camera was the first to feature digital LCD exposure readout in the viewfinder. With unobtrusive black-on-white numerals, LCD is never distracting plus, unlike LED displays, you can look at it for long periods without tiring. But equally notable, LCD requires just 1/10,000th the amount of power needed by LEDs, making the F3 series some of today's most energy-efficient cameras.

Smooth winding mechanism

Winding film is silky-smooth and effortless, thanks to the liberal use of ball bearings and a new winding mechanism. The F3 series employs a special connecting shaft as the core of winding power transmission. This allows the gear trains between the axes of the shutter drum, film sprocket, and takeup spool to be designed shorter and simpler than those of ordinary mechanisms, thus resulting in reduced winding torque.



Built-in metering system

With all electronic components built into the camera body, exposure control is possible with *every* interchangeable viewfinder and focusing screen. By utilizing an ingenious two-piece reflex mirror, the F3 series camera meters light TTL and on *optical axis* for absolute accuracy. No less than 50,000 special non-silvered spots at the center of the main mirror allow precisely 8% of the light to pass through. This light is then reflected off a "piggyback" secondary mirror down to the fast-reacting SPD light sensor located at the bottom of the mirror box. In addition, the meter has a highly center-weighted pattern, with 80% sensitivity being concentrated into the 12mm-diameter spot in the center of the viewfinder frame, so you know exactly what the camera is metering.

Nikon's titanium shutter

The F3 series features a Nikon-designed and built focal-plane shutter. Both the first and second curtains are wound around the main drum, thus helping simplify construction and assuring more efficient operation for years of trouble-free performance. Also the shutter uses ultra-strong, ultra-thin titanium shutter curtains which provide up to 150,000 shutter firings.

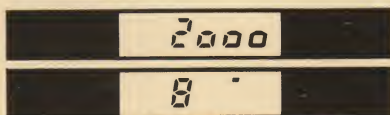
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Exposure Control

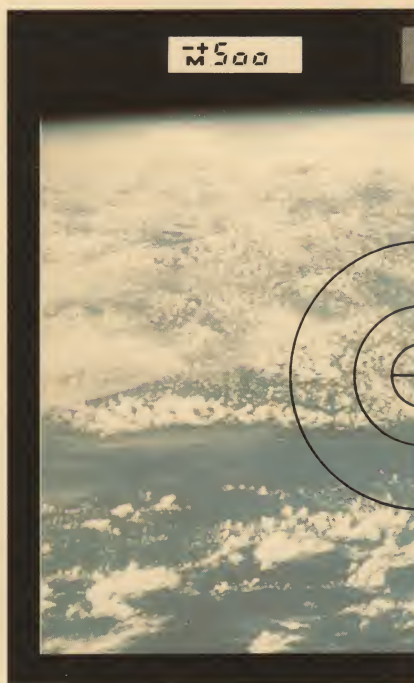


AUTO

Set the lens aperture. And the F3 series camera offers the matching metered shutter speed...automatically, and steplessly from 1/2000 sec. down to 8 full seconds. A digital LCD readout of the shutter speed appears above, *outside* the picture area. Also, the ADR (aperture direct readout) window clearly shows the lens aperture in use. And so you always have the final say on exposure even on AUTO, you retain the option to use the F3-series camera's exposure memory lock and exposure compensation dial.

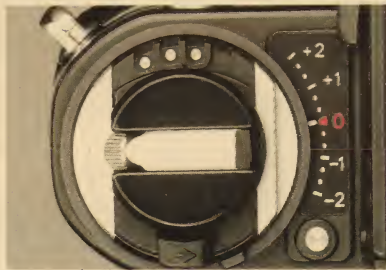


Shutter speed indication of 1/2000 sec. and 8 sec.



Exposure memory lock

For backlit subjects or those that contrast sharply with the background, you can use this control to get the correct exposure on AUTO. Just center the main subject in the viewfinder. Then depress the memory lock button and, while holding it in, recompose the picture and shoot.



Exposure compensation dial

The Nikon F3 Series brings the precision of quartz timing to its manual shutter speed range. A quartz oscillator that will not be fazed by fluctuations in temperature or voltage times all speeds. Add Nikon's ultra-reliable titanium shutter, and you have precise timing. As soon as the shutter speed dial is set manually, an "M" appears just to the left of the digital shutter speed in the LCD.



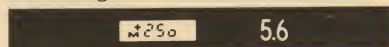
Mechanical usage

In the event of battery failure, you can still take pictures with the Nikon F3 series at a shutter speed of approx. 1/60 sec. by tripping the shutter with the special back-up mechanical release lever conveniently located on the front of the camera body. For making lengthy time exposures minus battery drain, you can set the shutter speed dial to "T" and trip the shutter using the same lever.

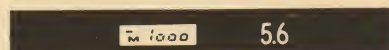


MANUAL

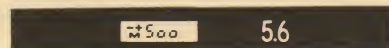
On Manual you have total control, complete with the unprecedented accuracy of quartz timing for whichever shutter speed you decide should go with whichever aperture you decide right for the image you have in mind. These quartz-controlled speeds range from 1/2000 sec. to a full 8 sec. And you'll always know what you're doing: the set f/stop and selected shutter speed are displayed inside the viewfinder, along with the symbols for manual metering.



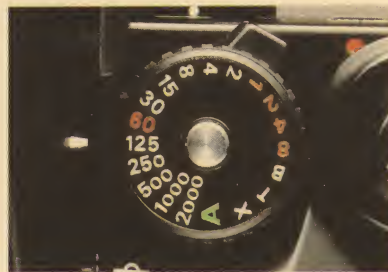
+ Overexposure



- Underexposure



- + Correct exposure



Usable shutter speeds

In the Manual mode, you can use any of 15 different shutter speeds from 1/2000 to 8 sec. The shutter speed dial also incorporates an "X" (1/80 sec.) setting for use with Nikon Speedlights, plus "B" (bulb) for long exposure and "T" (time) for time exposure.

Nomenclature/Other Cont



1 Self-timer LED

Blinks at even intervals to indicate self-timer is working; blinks faster during last two seconds.

2 Mirror lock-up lever

Locks the reflex mirror in the "up" position to reduce vibration. Useful for close-ups, document copying, or when using super-telephoto lenses.

3 Depth-of-field preview button

Pushed in to give you a visual confirmation of in-focus zones. Used also for stopped down exposure metering.

4 Exposure memory lock button

See page 12.

5 Backup mechanical release lever See page 13.

6 Reflex mirror

7 Meter coupling lever

8 Lens mounting index

Aperture/distance index on lens aligned with this index to mount lens.

9 Lens release button

Depressed as lens is turned clockwise until it comes off.

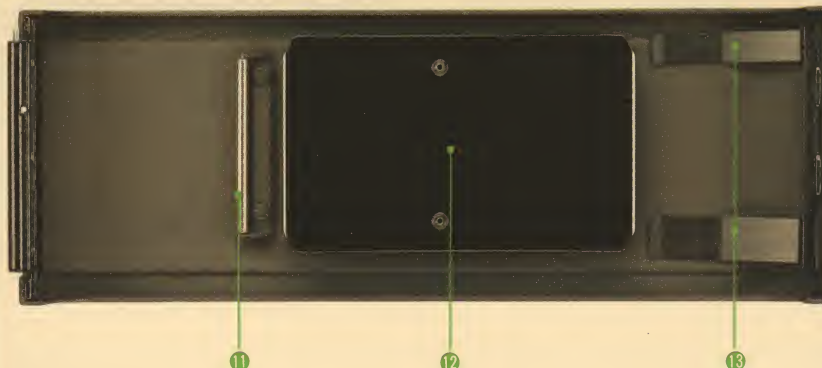
10 Sync terminal

Threaded for connection with Nikon sync cords for off-camera flash shooting.

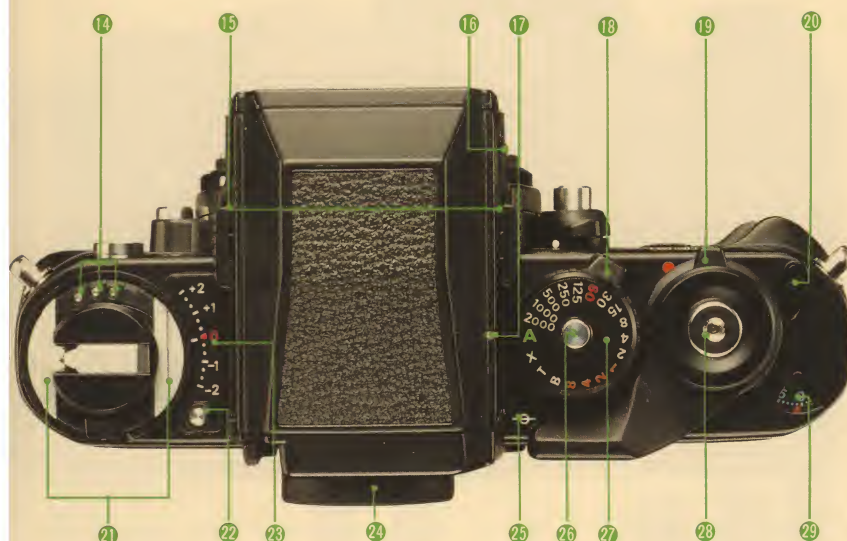
11 Film roller

12 Film pressure plate

13 Film cartridge stabilizer blades



rols



14 Hot shoe contacts

15 Finder release levers

16 Viewfinder illuminator button

Pushed to illuminate the LCD and ADR readouts in the viewfinder. Useful in dim light or at night.

17 Shutter speed index

18 Self-timer lever

Slide this lever and push the shutter release button; the self-timer provides a 10-sec. delay in shutter release. (See 1.)

19 Release lock

Locks the shutter release button to prevent accidental release and battery drain.

20 Multiple exposure lever

Pushed out to the ready position to cock the shutter without advancing the film.

21 Accessory shoe

22 Exposure compensation dial lock

23 Exposure compensation scale

24 Rubber eyecup

25 Film plane indicator

26 Lock release button

27 Shutter speed dial

28 Shutter release button

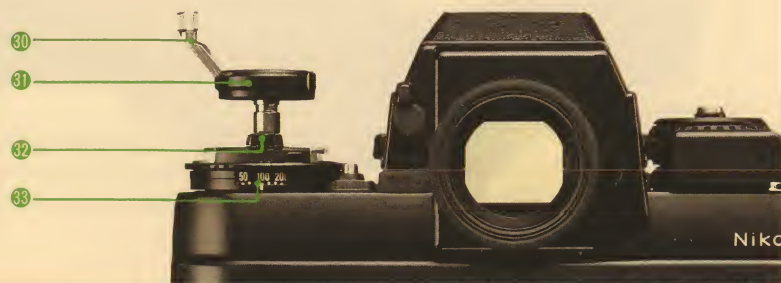
29 Frame counter

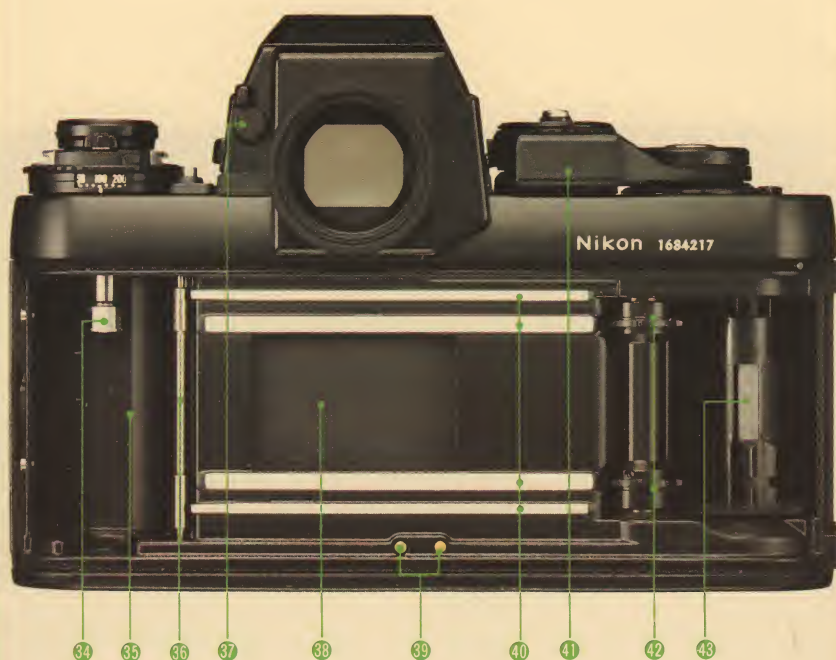
30 Film rewind crank

31 Film rewind knob

32 Camera back lock lever

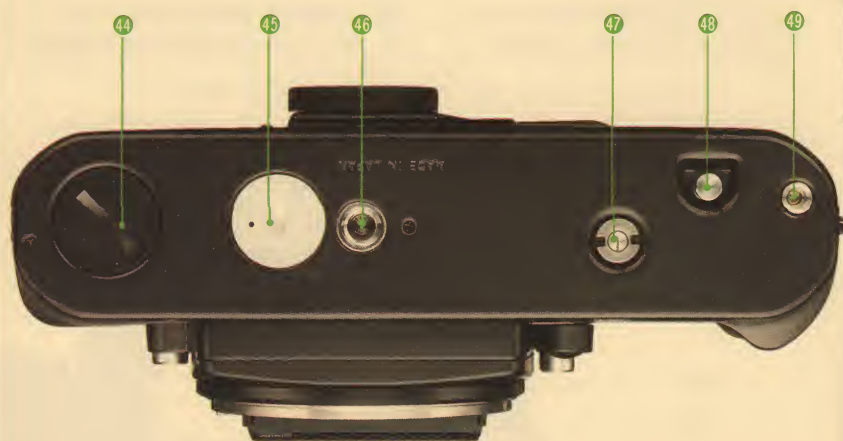
33 ASA/ISO film speed dial





- 34 Film rewind fork**
- 35 Film cartridge chamber**
- 36 Film guide roller**
Moves the film smoothly from cartridge to guide rails.
- 37 Eyepiece shutter lever**
Prevents stray light from entering the eyepiece when using self-timer or remote control.
- 38 Focal plane shutter**
- 39 Data back contacts**
For use with the Nikon MF-14 Data Back.
- 40 Film guide rails**
- 41 Film advance lever**

- 42 Film sprockets**
Sprocket holes on both sides of film engage sprocket teeth.
- 43 Film takeup spool**
- 44 Motor drive coupling cover**
Uncovered to install Nikon MD-4 Motor Drive.
- 45 Battery chamber cover**
- 46 Tripod/motor drive coupling socket**
Accepts tripod screw or MD-4 Motor Drive's attachment screw.
- 47 Motor drive coupling**
- 48 Film rewind button**
Pushed before rewinding film.
- 49 Motor drive positioning hole**



THE NIKON SYSTEM

No other system comes close.

FOCUSING SCREENS: 16 types K, A, J, L, P, B, D, U, E, C, M, G, H, R, S, and T in 22 models.

VIEWFINDERS: Eyelevel Finder DE-2, High-Eyepoint Finder DE-3, Action Finder DA-2, Waist-Level Finder DW-3, 6X High Magnification Finder DW-4. **Viewing Aids:** Right-Angle Viewing Attachment DR-3, Eyepiece Magnifier DG-2, Eyepiece Adapter DK-1, Eyepiece Correction Lenses, Rubber Eyecups DK-2/DK-3

MOTOR DRIVE: Motor Drive MD-4, Firing Rate Converter MK-1

MOTOR DRIVE ACCESSORIES: **Camera Backs:** 250-Exposure Film Back MF-4, Camera Back MF-6B, 250-Exposure Data Back MF-17;

Power Sources: NiCd Battery Unit MN-2 and Charger MH-2, AC/DC Converter MA-4; **Remote Control Accessories:** Remote Cord with Button Release MC-12, Intervalometer MT-2, Modulite Remote Control Set ML-1, Radio Control Set MW-2; **Accessories for Easy Operation:** Terminal Release MR-3, Pistol Grip Model 2 and Connecting Cord MC-3, Tripod Adapter AH-2, Remote Cords MC-10 and MC-4, Connecting Cords MC-17 and MC-17s

SPEEDLIGHTS: Speedlight SB-14, SB-11, SB-16A, SB-17, SB-21A

SPEEDLIGHT ACCESSORIES: Wide Flash Adapter, Bracket, Extension Cord, Sync Cord, Coiled Sync Cord, TTL Remote Cord, Battery Holder, Battery Pack, NiCd Battery, NiCd Battery Charger, AC Unit, Battery Pack for Medical Nikkor, Flash Unit Couplers

CLOSE-UP/COPYING EQUIPMENT: Bellows Focusing Attachment PB-6, Extension Bellows PB-6E, Focusing Stage PG-2, Extension Rings, Close-Up Attachment Lenses, Slide Copying Adapter PS-6, Macro Copy Stand PB-6M, Repro-Copy Outfit PF-4

OTHER ACCESSORIES: Data Back MF-14, Anti-Cold Battery Holder DB-2, Camera/Compartment Cases

LENSES: More than 70 Nikkor and Series E lenses, Teleconverters

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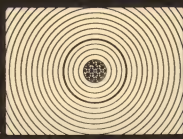
Type A



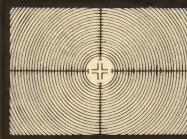
Type C



Type J



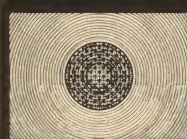
Type M



Type L



Type G

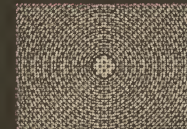


Type K

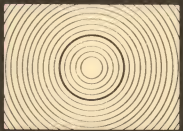
Type P



Type H



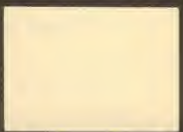
Type B/U



Type R



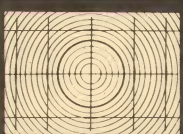
Type D



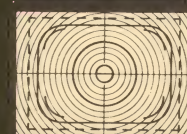
Type S



Type E



Type T



Nikon Focusing Screens



You don't need special tweezers to change focusing screens—just your fingers. To install or remove a screen, simply grasp the back of the screen by its protruding lip and drop it in or lift it out.

Type K

Standard equipment on both the Nikon F3HP and F3/T cameras. Features a bright and clear matte Fresnel field with split-image rangefinder and microprism collar.

Types A, J, L, P

Having either a split-image rangefinder and/or a microprism, these screens are designed for general photography.

Types B, D, U

Offer unobstructed viewing and easy focusing on their overall matte surfaces. Type B for general use. Types D and U designed especially for telephoto lenses.

Type E

With its grid pattern, this is ideal for architectural photography with PC-Nikkor lenses.

Types C, M

Used with the Nikon DW-4 Finder for taking high-magnification close-ups or for astrophotography.

Types G, H

Rapid focusing on the central or overall microprisms. Exceptionally bright image because matte surface is not used. Perfect for shooting in dim light or for fast-moving subjects. Each type available in four models to match various focal lengths.

Type R

Special split-image rangefinder with grid pattern. Excellent with lenses having maximum apertures of $f/3.5$ to $f/5.6$, especially the PC-Nikkor 28mm $f/3.5$

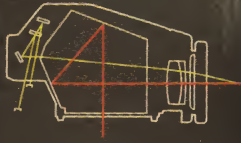
Type S

Same as Type K except provides area on the left side of frame for data imprinting when used with Nikon 250-exp. Data Back MF-17.

Type T

Indispensable when preparing slides for TV broadcasts.

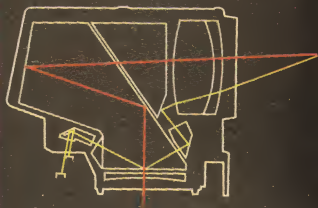
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Eyelevel Finder
DE-2



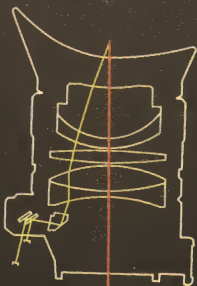
High-Eyepoint
Finder DE-3



Action Finder
DA-2



Waist-Level Finder
DW-3



6X High-Magnification
Finder DW-4



Nikon Viewfinders

Changing F3 series viewfinders is as easy as changing focusing screens. Just pull back both release levers, and lift the viewfinder out. You install one by pushing it in until it click-stops into place.

Eyelevel Finder DE-2

1.8X magnification with the 50mm lens at infinity. Eyepiece shutter incorporated.

High-Eyepoint Finder DE-3

Standard equipment on the Nikon F3HP and F3/T camera. The entire frame, including exposure information, is visible with the eye up to approx. 1 inch (25mm) away from the eyepiece. 0.75X magnification with the 50mm lens focused at infinity. Eyepiece shutter built in.

Action Finder DA-2

Perfect for situations where normal viewing is difficult or impossible, such as when wearing a helmet, goggles or with the camera encased in a special housing for underwater photography.

Waist-Level Finder DW-3

For use when the F3 series is used at a low angle or on a copy stand. Fold-up type viewing hood provided. The built-in flip-up magnifier provides a 5X magnification of the center of the image for accurate focusing.

6X High-Magnification Finder DW-4

For critical high-magnification close-up work and photomicrography. Its sophisticated optical system provides a clear, sharp, undistorted view of the entire image at full 6X magnification. Fitted with a -5 to +3 diopter adjustment for individual eyesight correction, plus rubber eyepiece cup and eyepiece shutter.

Viewing Aids



Eyepiece Magnifier DG-2

Eyepiece correction lens

Right-Angle Viewing Attachment DR-3

Right-Angle Viewing Attachment DR-3

Provides an upright and unreversed image with right-angle viewing. Individual eyesight adjustment possible. Excellent for copy work.

Eyepiece Magnifier DG-2

Gives 2X magnification of the central portion of the finder image. Eyesight adjustment provided. Useful for critical focusing in close-up photography.

Eyepiece Adapter DK-1

Lets you attach the DR-3, DG-2, or rubber eyecup to the DE-3 finder's eyepiece.

Eyepiece correction lenses

Allow nearsighted and farsighted photographers to view and focus accurately without having to wear their glasses. Nine lenses are available, from +3 to -5 diopters. F3HP has four exclusive eyepiece correction lenses, from +2 to -2.

Rubber Eyecups DK-2/DK-3

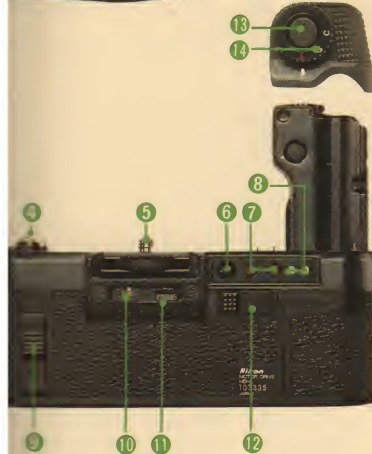
Increase viewing comfort and prevents stray light from entering viewfinder. The DK-2 is for F3HP camera and the DK-3 is for F3 camera.

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Nikon Motor Drive



Nikon continues to write and rewrite the history of motor drives. In 1957, Nikon created the very first professionally-accepted motor drive. And now with the MD-4, we have the fastest standard-production motor drive on the market. At 6 frames per second on continuous, the MD-4 lets you create action-packed sequences; or you can capture the "decisive moment" in a single frame. Combine this with powered film rewinding—in a short 4.5 sec. (for a 36-exposure film roll)—and you have a motor drive that won't miss a thing.



Nikon MD-4 Motor Drive

Sculpted to be a natural extension of the camera's structural lines, the MD-4 comes as tough as an F3 series camera. All-metal die-cast body, sophisticated micro-electronics and film winding mechanism utilizing ball bearings are among its features. The exceptionally low winding torque of the camera and MD-4 means you can shoot up to 140 rolls of 36-exp. film on one set of eight AA-type alkaline batteries. Also, the MD-4 powers all camera functions once it's attached to an F3 series camera. Should it in turn be powered by the highly cold-resistant NiCd Battery Unit, you'll be able to take pictures in well below freezing point temperatures—down to -68°F (-20°C). An accessory you won't want to leave home, the MD-4 provides non-stop excitement at the push of a button, all controls right where you want them. At the top is the trigger button (with which you can now turn the meter on by a light touch), plus the mode selector with three settings: "C" (continuous), "S" (single frame), and "L" (lock). Motorized rewind levers with a safety lock for automatic film rewinding are on the back. A build-in frame counter allows you to predetermine the number of exposures to be shot on "C".

- ① External power terminal
- ② Remote terminal
- ③ Magazine back terminal
- ④ Automatic film rewind fork
- ⑤ Attachment wheel
- ⑥ Battery check button
- ⑦ LED indicators
- ⑧ Auto rewind-stop terminals
- ⑨ Rewind slide 2
- ⑩ Frame counter
- ⑪ Counter setting dial
- ⑫ Rewind slide 1 with lock button
- ⑬ Trigger button
- ⑭ S-C mode selector

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Nikon Motor Drive Access



MF-4



MF-17



MF-6B



MF-18

250-Exposure Film Back MF-4

Ideal for extended shooting in industrial or scientific applications. Trigger button contributes to handling ease. Used with two 250-Exposure Magazine MZ-1 for loading up to 33 ft. (10 m) of bulk film.

Camera Back MF-6B

Automatically stops the film from being rewound completely back into the cartridge during auto rewind.

250-Exposure Data Back MF-17

Used in combination with the MF-4. Allows imprinting of data (either year/month/day, hour/minute/second, or handwritten memo) on the film. Compatible with every F3 series camera. Requires Type S screen.

Data Back MF-18

Featuring a quartz-controlled clock,

this interchangeable camera back provides an LCD of the time, date, or sequential number from -2 to 2001 and lets you imprint this data in the space between frames if so desired. The MF-18 automatically stops the film from being rewound completely back into the cartridge during auto rewind. It also has a built-in alarm, making it very handy for travel.

Power Sources



MN-2 MH-2 MA-4

NiCd Battery Unit MN-2 and Charger MH-2

Powers the MD-4. 3.5-hour recharging time; may be recharged approx. 100 times. Works great in pairs—use one while the other is being recharged.

AC/DC Converter MA-4

Supplies the MD-4 with a stable DC current for extended studio use. Used with the MC-11 External Power Cord.

ories



Accessories for Easy Operation

Terminal Release MR-3

Designed for vertical shooting. Also allows use of the AR-3 Cable Release or the AR-7 Double Cable Release.

Pistol Grip Model 2 and Connecting Cord MC-3A

A convenient way to handle the camera when using long telephoto lenses.

Tripod Adaptor AH-3

Moves the tripod socket to the middle of the MD-4's base.

Remote Cord MC-10

Allows remote control of the MD-4 by thumb switch from up to 9.8ft. (3m) away.

Remote Cord MC-4A

Plugs into the MD-4's remote socket. With banana plugs, the MC-4A can be used to fire up to three motor-driven F3-series cameras simultaneously.

Connecting Cords MC-17 and MC-17S

Either one enables the firing of two motor-driven F3 series cameras simultaneously.

Remote Control Accessories

Remote Cord with Button Release MC-12A

Allows you to operate the camera from up to 9.8ft. (3m) away.

Intervalometers MT-2

For unmanned time-lapse photography or work sampling. Quartz-controlled MT-2 provides 2 or 16-sec. delay in shutter release, allowing time for flash recycling. Can be used with other remote control devices like the MW-2.

Modulite Remote Control Set ML-1

Controls up to two F3-series cameras by a modulated burst of light. Compact and easy to use from up to 196.8ft. (60m) away.

Radio Control Set MW-2

Provides wireless remote control up to 2295ft. (700m) away. Three cameras can be controlled simultaneously.

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professionals

Nikon Speedlights



Automatic through-the-lens (TTL) control of the flash exposure—just think of the possibilities. You can bounce the light off the ceiling or walls, even shoot through filters with a wide choice of apertures at your disposal without worrying about the exposure. With the Nikon TTL Speedlights SB-14, 11, 16A and 17, the Nikon F3 series controls flash exposure through the lens and directly off the film plane for perfect exposures every time.

With the camera on auto, the correct synchronization speed (1/80 sec.) is automatically set, so it's impossible to make a mistake. The LED ready-light inside the camera's viewfinder not only lights up when the flash is ready to fire, but also blinks after the shot if the light output was insufficient.

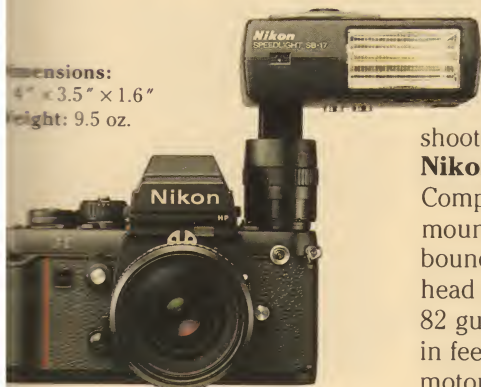
Dimensions:
3.2" x 6.7" x 3.9"
Weight: 18.0 oz.



Nikon SB-16A Speedlight

Versatile, with powerful guide number of 105 (ASA/ISO 100 in feet). Features two flash heads for more natural bounce-flash portraits: main head tilts and rotates while secondary faces straight ahead to provide catchlight in subject's eyes. Main head zooms to match coverage of 28, 35, 50 and 85 mm (24 mm usable with wide-flash adapter) lenses. MD (motor drive) setting provides 4 fps flash shooting for up to 8 frames.

Dimensions:
4" x 3.5" x 1.6"
Weight: 9.5 oz.



Nikon SB-17 Speedlight

Compact, versatile direct-mounting unit provides control of bounce flash with rotating flash head and tilting flashtube module. 82 guide number (ASA/ISO 100 in feet) and synchronization with motor drive (3.8 fps) for four shots.

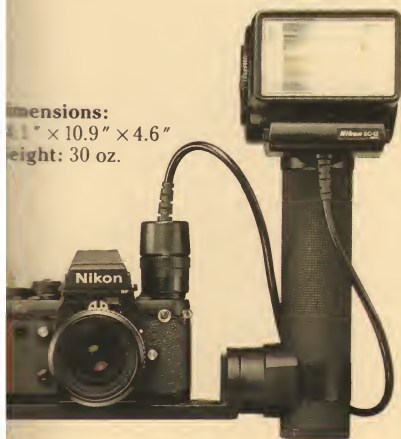
Dimensions:
3.7" x 8.5" x 3.6"
Weight: 18.7 oz.



Nikon SB-14 Speedlight

Compact handle-mount speedlight with a guide number of 105 (ASA/ISO 100 in feet). Flash head tilts back 120° and rotates 120° to the right or left for total bounce control. Used with separate Nikon SD-7 Battery Pack which accepts six C-type alkaline batteries. Comes with Sensor Unit SU-2 for non-TTL automatic operation. Optional TTL Remote Cord SC-12 provides TTL automatic operation.

Dimensions:
4.1" x 10.9" x 4.6"
Weight: 30 oz.



Nikon SB-11 Speedlight

Nikon's most powerful speedlight; guide number of 118 (ASA/ISO 100 in feet). Features 120° tilting flash head for bounce flash and accepts batteries in its grip for convenient one-piece operation. Comes with the SU-2. Automatic TTL control possible with the SC-12.

Weight without batteries.

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Nikon TTL Multi-Flash System

Leave it to Nikon to develop a professional-quality TTL multi-flash system that anyone can master right away. Choose any combination of TTL Speedlights SB-16A or B and SB-17. Then use the TTL remote or TTL multi-flash sync cords available for TTL off-camera or multi-flash photography. Now you're ready to create truly stunning effects or simply add extra sparkle to portraiture or interior photography. The F3 series camera body's built-in sensor automatically measures and controls the light from all the units. So you always get perfectly exposed pictures. Without complicated manual exposure-value calculations or accessory flash meters.

TTL Remote Cord SC-14

Enables the SB-16A or SB-17 to be used up to 3 feet off a Nikon F3 series camera for TTL operation.

TTL Multi-Flash Sync Cords SC-18 and SC-19

Used to connect TTL flash units to each other for TTL multi-flash operation.

Flash Tripod Adapter AS-11

Using the SB-16A or SB-17 away from the camera? The AS-11 has a tripod screw so you can attach either one to a tripod.



**Nikon Macro Speedlight
SB-21A**

Enables you to use TTL automatic exposure for shadowless wraparound macro photography. Two built-in flash modules provide full-surround illumination, so you can flawlessly capture the details of the world in miniature, without distracting shadows. Convenient focus illuminator ensures pinpoint focus adjustment. And a wide illumination panel lets you shoot flash-to-subject distances closer than 1.6 in. (40 mm). Can be used with external power source (AC or DC).



Flash Unit Coupler AS-4

Convert F3-type accessory shoe to standard ISO-type hot shoe for attachment of speedlights such as SB-20 or SB-22.

Flash Unit Coupler AS-7

This coupler allows you to change film without removing the flash unit. Features both F3 and ISO-type accessory shoe for direct mounting of all Nikon Speedlights, including SB-20 and SB-22.

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Nikon Close-Up/Copying E



Discover the enchanting world in miniature
with Nikon's sophisticated close-up accessories.

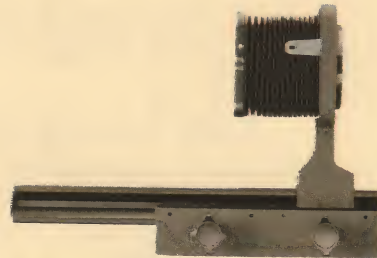
Nikon provides various tools and
equipment to help your discovery. From
an easy to use close-up attachment lens to
the professional Nikon PB-6 Bellows
Focusing Attachment.

quipment



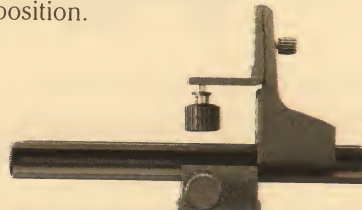
Bellows Focusing Attachment PB-6

At the heart of the Nikon system of close-up photography is the Bellows Focusing Attachment PB-6—a unit so superbly crafted that you'll delight in using it. With the twist of a knob you can vary the lens extension at will, producing frame-filling images of the tiniest of subjects. The PB-6 provides continuously variable extension from 48 mm to 208 mm. When used with the Double Cable Release AR-7, automatic aperture control is possible even with a lens in the reversed position.



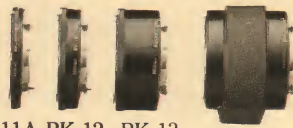
Extension Bellows PB-6E

The extension scale of the PB-6E joins perfectly with that of the PB-6 for accurate determination of extension, from 83 to 438 mm. Attaches to the PB-6 for magnifications up to an astounding 23X life-size when using a 20 mm wideangle lens in the reverse position.



Focusing Stage PG-2

Simplifies close-up focusing when the camera or camera plus motor drive is mounted on a tripod.



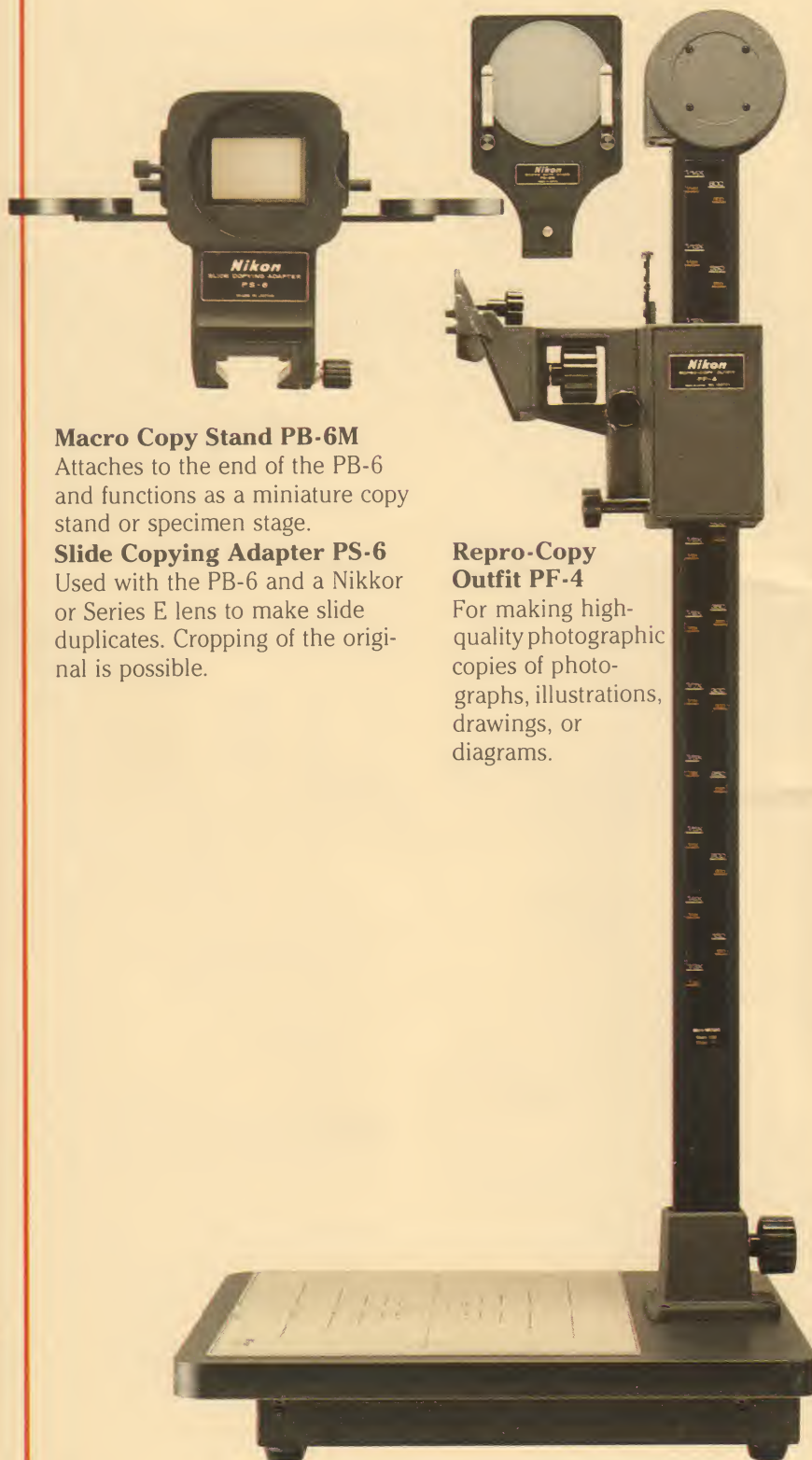
Extension Rings

Another easy way of making close-ups. PK-11A, 12, and 13 and PN-11 offer automatic aperture operation with a Nikkor AI or Series E lens, while the Extension Ring Set K consists of five rings which can be used singly or in combination.



Close-Up Attachment Lenses

They simply screw onto the front of 52 mm or 62 mm front-thread lenses to magnify the subject. Nikon Integrated Coating (NIC) used for superb color fidelity. Lenses with a "T" indication are for use with telephoto lenses and feature 2-element construction.



Macro Copy Stand PB-6M

Attaches to the end of the PB-6 and functions as a miniature copy stand or specimen stage.

Slide Copying Adapter PS-6

Used with the PB-6 and a Nikkor or Series E lens to make slide duplicates. Cropping of the original is possible.

Repro-Copy Outfit PF-4

For making high-quality photographic copies of photographs, illustrations, drawings, or diagrams.

Other Nikon Accessories



Data Back MF-14

Featuring a quartz-controlled clock, this interchangeable camera back provides an LCD of the time, date, or sequential number from 1 to 2001 and let you imprint this data in the lower right-hand corner if so desired. The MF-14 also has a built-in alarm, making it very handy for travel. Designed for snapshots, scientists, or anyone else who wants to create lasting memories.



Anti-Cold Battery Holder CB-2

A special battery pack holding 2 AA-penlight alkaline batteries which goes inside the coat, allowing the F3 series camera to be used in below-freezing temperatures.



CS-15



CF-22



FB-17



FB-11A

Camera/Compartment Cases

Handsome and functional, Nikon cases let you carry your equipment in style. Made of genuine leather, Soft Leather Case CS-15 and Semi-Soft Leather Cases CF-21, 21A, 22 provide needed protection. Or you might consider the stylish Custom Shoulder Cases CB-1, 2, and 3. And for carrying a variety of cameras and accessories, Nikon makes a comprehensive line of compartment cases ranging in size from the large FB-11A to the compact FB-17.

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Nikkor Lenses

From fisheye to super-telephoto,
zoom to perspective-control, micro to reflex,
there are more than 70 Nikkor and Series E lenses
to challenge your imagination. The more
choices, the better the vision.



Technological achievements

All lenses are constructed of the finest optical glass produced in Nikon's own glassworks, while all Nikkor lenses are multicoated, using Nikon Integrated Coating (NIC) for superior contrast and color rendition. The Close-Range Correction (CRC) system ensures exceptional image quality at close distances. Extra-low Dispersion (ED) glass is used to correct chromatic aberration in long telephoto lenses, and Internal Focusing (IF) makes focusing totally responsive with no extension in the lens barrel.



TC-201 TC-301 TC-14A TC-14B

Teleconverters to increase the variation even more

Made to the same exacting standards used in the design and manufacture of Nikkor lenses, Nikon teleconverters increase the focal length of a lens without any loss in picture quality. Nikon Integrated Coating (NIC) applied to maintain the prime lens's high quality. *TC-201* and *TC-301* double the focal length. The *TC-301* focuses from infinity to 1:1 life-size when used with the 200mm f/4 IF Micro-Nikkor. *TC-14A* and *TC-14B* increase focal length by 1.4X. *TC-14C* does this but works only with 300mm f/2 ED-IF. Compact and easy to carry

Lens specifications

	Lens	Groups- Elements	Picture Angle	Minimum f/Stop	Minimum Focus (ft.)	Filter (mm)
Wideangle	13mm f/5.6††	12~16	118°	22	1	Bayonet*
	15mm f/3.5	11~14	110°	22	1	Bayonet*
	18mm f/3.5	10~11	100°	22	0.82	72
	20mm f/2.8	9~12	94°	22	0.85	62
	24mm f/2	10~11	84°	22	1	52
	24mm f/2.8	9~9	84°	22	1	52
	28mm f/2	8~9	74°	22	0.9	52
	28mm f/2.8	8~8	74°	22	0.7	52
	35mm f/1.4	7~9	62°	16	1	52
	35mm f/2	6~8	62°	22	1	52
	35mm f/2.8	5~5	62°	22	1	52
Normal	50mm f/1.2	6~7	46°	16	1.7	52
	50mm f/1.4	6~7	46°	16	1.5	52
	50mm f/1.8	5~6	46°	22	2	52
Telephoto	85mm f/1.4	5~7	28°30'	16	3	72
	85mm f/2	5~5	28°30'	22	3	52
	105mm f/1.8	5~5	23°20'	22	3.5	62
	105mm f/2.5	4~5	23°20'	22	3.5	52
	135mm f/2	4~6	18°	22	4.5	72
	135mm f/2.8	4~5	18°	32	4.5	52
	180mm f/2.8 ED	5~5	13°40'	32	6	72
	200mm f/2 ED-IF	8~10	12°20'	22	9	122
	200mm f/4	5~5	12°20'	32	7	52
	300mm f/2 ED-IF	8~11	8°10'	16	13	52
	300mm f/2.8 ED-IF	6~8	8°10'	22	13	39
	300mm f/4.5	5~6	8°10'	32	12	72
	300mm f/4.5 ED-IF	6~7	8°10'	32	10	72
	400mm f/2.8 ED-IF	6~8	6°10'	22	15	52
	400mm f/3.5 ED-IF	6~8	6°10'	22	15	122/39**
	400mm f/5.6 ED-IF	6~7	6°10'	32	15	72
	500mm f/4 ED-IF P*					
	600mm f/4 ED-IF	6~8	4°10'	22	25	39
	600mm f/5.6 ED-IF	6~7	4°10'	32	20	39
	800mm f/5.6 ED-IF	6~8	3°	32	32	52 (rear)
	800mm f/8 ED-IF	7~9	3°	32	35	122/39**
Reflex	500mm f/8	6~6	5°	—	5	39**
	1000mm f/11	5~5	2°30'	—	25	39**
	2000mm f/11††	5~5	1°10'	—	60	Built-in
Zoom	28~85mm f/3.5~4.5	15~11	74°~28°30'	22	3	62
	35~70mm f/3.3~4.5	7~8	62°~34°20'	22	1.2	52
	35~70mm f/3.5	9~10	62°~34°20'	22	1.2	62
	35~105mm f/3.5~4.5	12~16	62°~23°20'	22	0.9	52
	35~135mm f/3.5~4.5	14~15	62°~18°	22	1.4	62
	35~200mm f/3.5~4.5	17~13	62°~12°20'	22	5.5	62
	80~200mm f/4	9~13	30°10'~12°20'	32	4	62
	50~300mm f/4.5 ED	11~15	46°~8°10'	32	8.5	95
	100~300mm f/5.6	10~14	24°20'~8°10'	32	2.34	62
	200~400mm f/4 ED	10~15	12°20'~6°10'	32	13	122
Fisheye	180~600mm f/8 ED††	11~18	13°40'~4°10'	32	8.5	95
	6mm f/2.8††	9~12	220°	22	0.9	Built-in
	8mm f/2.8	8~10	180°	22	1	Built-in
	16mm f/2.8	5~8	180°	22	1	Bayonet*
	28mm f/3.5 PC	8~9	74°	22	1	72
	35mm f/2.8 PC	7~7	62°	32	1	52
	58mm f/1.2 Noct	6~7	40°50'	16	1.7	52
	55mm f/2.8 Micro	5~6	43°	32	0.9	52
	105mm f/2.8 Micro	9~10	23°20'	32	1.34	52
	200mm f/4 Micro IF	6~9	12°20'	32	2.34	52
Special	120mm f/4 Medical IF	6~9	18°50' (1/11X)	32	1.1	49†
	105mm f/4.5 UV	6~6	23°20'	32	1.57	32
	28mm f/2.8	5~5	74°	22	1	52
Series E	135mm f/2.8	4~4	18°	32	5	52

☆ CPU built-in. Available soon.

* Included with lens.

** Front filter/rear filter

† Close-up lens size.

†† Manufactured upon receipt of order.

Lens Case	Lens Hood	Weight (oz.)	Dimensions (dia. x length) (in.)	TC-201	TC-301	TC-14A	TC-14B	TC-16
14	Built-in	42.4	4.5X3.5	●	—	●	—	—
17	Built-in	22.3	3.5X3.3	●	—	●	—	—
37 CP-8	HK-9	12.4	3.0X2.4	●	—	▲	—	—
30S No.61 CP-8	HK-14	9.2	2.6X1.7	●	—	●	—	—
31S No.61 CP-8	HK-2	10.6	2.5X2.0	●	—	●	—	●
30S No.61 CP-8	HN-1	8.8	2.5X1.8	●	—	●	—	—
31S No.62 CP-8	HN-1	12.7	2.5X2.3	●	—	●	—	●
30S No.62 CP-8	HN-2	8.8	2.5X1.8	●	—	●	—	—
31S No.61 CP-8	HN-3	14.1	2.7X2.4	●	—	●	—	●
31S No.61 CP-8	HN-3	9.9	2.5X2.0	●	—	●	—	●
30S No.61 CP-8	HN-3	8.5	2.5X1.8	●	—	●	—	—
34A No.61 CP-8	HS-12, HR-2	13.4	2.7X1.9	●	—	▲	—	●
34A No.61 CP-8	HS-9, HR-1	8.8	2.5X1.6	●	—	●	—	●
30S No.61 CP-8	HR-4	5.1	2.5X1.1	●	—	●	—	—
17 No.62 CP-9	HN-20	21.9	3.2X2.5	○	—	○	—	●
31S No.61 CP-8	HS-10	10.9	2.5X2.1	●	—	●	—	●
15S No.62 CP-9	Built-in	20.5	3.1X3.2	○	—	○	—	●
12S No.62 CP-9	Built-in	15.4	2.5X2.7	●	—	▲	—	—
15S No.62 CP-9	Built-in	30.4	3.2X3.7	○	—	○	—	●
37S No.62 CP-9	Built-in	15.4	2.5X3.3	▲	—	●	●	—
15A	Built-in	28.3	3.1X5.1	○	—	○	—	—
43	Built-in	89.9	5.2X9.2	○	—	▲	○	●
13 No.63 CP-9	Built-in	180	2.6X4.6	▲	—	●	—	—
200	Built-in	250.8	7.7X13.6	○	○	▲	○	●
43	Built-in	88.3	5.4X9.5	—	●	▲	●	—
21A	Built-in	42.4	3.1X7.6	—	●	▲	●	—
35	Built-in	37.4	3.1X7.6	—	●	—	●	—
100 No.59	Built-in	180.3	6.4X14.8	●	●	—	●	—
101A No.57	Built-in	98.9	5.3X11.7	—	●	▲	●	—
37A	Built-in	42.4	3.3X10.0	—	●	—	●	—
401	Built-in	199.3	6.8X18.6	—	●	—	●	—
12A No.57	Built-in	98.8	5.2X15.6	—	●	—	●	—
400	Built-in	190.8	6.4X21.8	—	●	—	●	—
1203	Built-in	116.4	5.3X18.1	—	●	—	●	—
39	Screw-in	29.7	3.5X4.3	▲	—	▲	△	—
29	Built-in	67.1	4.7X9.2	▲	△	▲	△	—
14 case	—	618.1	10.3X23.4	▲	●	—	●	—
33S No.62 CP-9	HB-1	18.0	2.6X3.1	●	—	●	—	—
31S No.61	HN-2	9.0	2.5X2.4	●	—	●	—	—
33S No.62 CP-9	HN-22	18.4	2.6X3.8	●	—	●	—	—
33S No.63	HK-11	18.0	2.5X3.4	●	—	●	—	—
15S No.62	HK-22	21.2	2.7X4.1	●	—	●	—	—
13A No.63	HK-15	25.9	2.7X4.6	●	—	—	—	—
35A No.63	HN-23	28.6	2.9X6.1	●	—	▲	—	—
54 CE-2	HK-5	68.9	3.9X9.4	●	—	●	—	—
40	HN-24	32.8	2.9X7.8	▲	—	—	●	—
54	Built-in	128.9	5.7X13.0	▲	△	—	●	—
1360	HN-16	127.1	4.1X15.6	—	●	—	●	—
14 case	—	183.7	9.3X6.3	●	—	●	—	—
41	—	38.9	4.8X5.0	●	—	●	—	—
30S No.61 CP-8	Built-in	11.7	2.5X2.2	●	—	●	—	—
34A No.62	HN-9	13.4	3.1X2.5	—	—	—	—	—
34A No.61	HN-1	11.3	2.4X2.4	—	—	—	—	—
34A No.61 CP-8	HS-7, HR-2	16.4	2.9X2.0	○	—	○	—	—
31S No.61 CP-8	HN-3	10.2	2.5X2.8	●	—	●	—	—
33S CP-9	HS-14	18.2	2.6X3.3	●	—	●	—	—
35	Built-in	28.3	2.6X6.8	—	●	▲	●	—
100erette	—	31.4	8.9X5.6	—	—	—	—	—
1401erment case	—	—	—	—	—	—	—	—
14S No.63 CP-9	—	18.2	2.7X4.7	—	●	—	●	—
30S No.61 CP-8	HR-6	5.5	2.5X1.4	●	—	●	—	—
35S No.62 CP-8	Built-in	14.0	2.5X3.2	●	—	●	—	—

● Usable.

○ When used at aperture smaller than f/11 with high shutter speeds, there is occasional uneven exposure.

▲ Usable, but there is occasional vignetting.

△ Usable, if the rear screw-in filter is removed.

Specifications

Nikon F3HP & F3/T

Type of camera: 35 mm single-lens reflex

Picture format: 24 mm × 36 mm (35 mm film format)

Lens mount: Nikon bayonet type

Lenses: Nikkor 50 mm f/1.2, 50 mm f/1.4, 50 mm f/1.8 as standard; more than 70 Nikkor and Series E lenses are usable

Shutter: Electromagnetically controlled, horizontal-travel, titanium foil focal-plane shutter

Shutter release button: Switches meter on when depressed halfway (after shutter release lock is released); meter then remains on for 16 sec. after finger is taken off button; threaded in the center to accept standard cable release

Automatic exposure control: Aperture-priority automatic exposure control; stepless shutter speeds from 8 sec. to 1/2000 sec.

Manual exposure control: Quartz digital control for 16 shutter speeds from 8 sec. to 1/2000 sec. including "X" (1/80 sec.) "B" and "T" also provided

Mechanical shutter control: Possible at "T" setting on shutter speed dial or at approx. 1/60 sec. when using backup mechanical release lever.

Backup mechanical release lever: Trips shutter at approx. 1/60 sec. regardless of shutter speed dial setting (except "T"); used when batteries become weak or exhausted, or none are installed in the camera

Exposure metering: TTL center-weighted full-aperture metering; aperture stop-down metering possible; silicon photodiode (SPD) and metering circuits incorporated into camera body; meter works with all interchangeable viewfinders

Metering range: EV 1 to EV 18 (i.e., f/1.4 at 1 sec. to f/11 at 1/2000 sec. with 50 mm f/1.4 lens and ASA/ISO 100 film)

Film speed setting: ASA/ISO 12 to 6400

Exposure memory lock: Via button

Exposure compensation: Via dial; +2 to -2 EV in one-third increments

Focusing screen: Type K as standard; interchangeable with 21 other types

Viewfinder: Eyelevel High-Eyepoint Finder DE-3 as standard; both equipped with eyepiece shutter; each interchangeable with 5 other types

Finder coverage: Virtually 100%

Finder magnification: 0.75X (both with 50 mm lens set at infinity)

Viewfinder display: Liquid crystal display (LCD) shows shutter speed; on Auto, "+ 2000" indicates overexposure, "-8-" underexposure; on Manual, "M" appears with "+" indicating overexposure, "-" underexposure, and "- +" correct exposure; LED ready-light glows when Nikon Speedlight SB-16A and SB-17, plus SB-11 and SB-14 with TTL Remote Cord SC-12, is completely recycled; aperture in use also shown through aperture-direct-readout (ADR) window

Viewfinder illuminator: Via button; illuminates both LCD and ADR f/number

Multiple exposure control: Via lever

Depth-of-field preview: Via button; coaxial with the mirror lockup lever

Reflex mirror: Automatic instant-return type with lockup facility; incorporates air damper and brake mechanism for reduced vibration and noise

Self-timer: Quartz-controlled 10 sec. delayed exposure; LED blinks at 2 Hz for first 8 sec., then at 8 Hz for last 2 sec.; setting cancellable

Film advance lever: Wound in single stroke or series of strokes; 30° stand-off angle and 140° winding angle; automatic film advance possible when Nikon MD-4 Motor Drive is used

Film rewind: By crank after film rewind button is depressed; automatic film rewind possible when Nikon MD-4 is used

Frame counter: Additive type; frame numbers from 0 to 40; automatically reset when camera back is opened

Flash synchronization: Possible at all speeds up to 1/80 sec. with Nikon speedlights; with SB-16A and SB-17, plus SB-11 and SB-14 with TTL Remote Cord SC-12, sync speed is automatically set to 1/80 sec. with dial at A or 1/125 sec. and above; at 1/60 sec. or slower, flash synchronizes with speed setting as set; threaded sync terminal provided for off-camera or multiple-flash photography

Accessory shoe: Provided; special Nikon F3 type located at base of rewind knob; accepts Nikon Speedlight SB-16A, SB-17 or TTL Remote Cord SC-12 from SB-11 or SB-14 for TTL direct flash output control; two types of flash couplers available for mounting ISO-type or F2-type direct mounting flash units

Motor drive coupling: Electrical contacts and mechanical couplers provided for operation with Nikon MD-4 Motor Drive

Camera back: Hinged; opened by pushing safety lock while pulling up rewind knob; memo holder provided; interchangeable with Nikon Camera Back MF-6B, Data Back MF-14, or 250 Exposure Magazine Back MF-4

Power source: Two 1.55V silver-oxide batteries (S-76 or SR-44 type), two 1.5V alkaline-manganese batteries or one 3V lithium battery (CR-1 3N type); when Nikon MD-4 Motor Drive is attached, camera gets battery power entirely from batteries in motor drive

Body finish: Black F3/T also available in chrome finish

Body dimensions (W×H×D): 5.8" × 4" × 2.7" (148.5 × 101.5 × 69.0 mm)

Body weight: F3HP: 26.8 oz. (760 g); F3/T: 26 oz. (740 g)

Nikon MD-4 Motor Drive

Camera fitting: Nikon F3 series

Shooting modes: Choice of single frame (S) or continuous (C) firing via S-C mode selector; lock (L) position provided to prevent inadvertent release

Shutter release: By electromagnetic trigger button; also switches on camera meter when depressed halfway; meter remains on for 16 seconds after finger is lifted off button

Firing speeds:

Type of battery	Number of frames per second	
	NORMAL	MIRROR UP
Eight AA-type 1.5V alkaline batteries	3.8	4
MN-2 NiCd Battery Unit	5.5	6
MA-4 AC/DC Converter	5	5.5

The firing rates decreases at shutter slower than 1/125 sec.

Frame counter: Subtractive type which shows the number of frames remaining; useful in very low temperatures

Automatic winding stop: Provided; motor automatically shuts off at films end; the LED lights up continuously when the film supply is exhausted

Automatic film rewind: 4.5 sec. with NiCd Battery Unit MN-2 and 8 sec. with alkaline penlight batteries for 36-exposure roll; automatic film rewind stop with optional Nikon MF-6B Camera Back

Dimensions (H×W×D): 5.8" × 4.5" × 2.8" (146.5 × 115 × 71 mm)

Weight: 16.9 oz. (480 g)

Nikon MF-14 Data Back

Usable film speed settings: ASA/ISO 100 ~ 400 for B&W films; 25 ~ 400 for color films

Data imprint type: By 7-segment, 6-digit red LEDs

Imprint data: Year/Month/Day, Day/Hour/Minute or any sequential number up to 2000

Data imprint decision: By data imprint ON/OFF switch

Quartz-timed alarm device: Emits alarm tone at pre-set time

Power source: Two 1.55V silver-oxide (SR-44 type) batteries

Timing accuracy: Within ±30 seconds a month (at normal temperature)

Dimensions (W×H×D): 5.9" × 2.1" × 1" (148.5 × 53.5 × 26 mm)

Weight: 3 oz. (85 g) without batteries

Specifications are subject to change without notice.

Nikon Photo Contest International



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